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Docket No. F-8632

Ser. No. 10/531,815

AMENDMENTS TO THE CLAIMS:

Please replace the claims with the claims provided in the listing below wherein status, amendments, additions and cancellations are indicated.

1. (Currently Amended) Method for comminution and tribochemical activation of inorganic materials, comprising:

moving objects transonically to thereby create impact pressure fronts that occur as compression shocks, said impact pressure fronts having a pulse duration of less than 10 μ s and a repetition rate greater than 8kHz; and

comminuting said inorganic materials to a particle size of less than 1 μ m by exposing said inorganic materials to said pressure fronts, wherein

said moving of said objects transonically comprises moving said objects along a curvilinear path wherein a movement of said objects along said curvilinear path is at a transonic speed.

2. (Previously Presented) Method in accordance with claim 1, wherein said inorganic materials have a crystalline structure, and said comminuting produces a conglomerate of activated mixed crystals that has an increased capacity for crystal formation when water is added.

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3. (Previously Presented) Method in accordance with claim 1, wherein an effective duration of said impact pressure fronts last until a crystal lattice structure of said inorganic materials has been destroyed.

4. (Currently Amended) Method in accordance with claim 3, wherein said impact pressure fronts are created by the rotation of said objects at a transonic speed range, wherein said objects are formed in an aerodynamic shape.

5. (Currently Amended) Method in accordance with claim 3, wherein said objects comprise first objects and second objects, said first objects and second objects moving rotating in opposite directions.

6. (Previously Presented) Method in accordance with claim 1, wherein the comminution takes place under a protective gas.

7-22. (Cancelled).

23. (Currently Amended) Method according to claim [[19]] 1, wherein where said moving of said objects comprises moving rotating said objects relative to an around a common axis of rotation.

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24. (Currently Amended) Method according to claim 23, wherein said objects comprise first objects and second objects, wherein said first objects and said second objects are moved ~~rotated~~ in different directions.

25. (Currently Amended) Method according to claim [[19]] 1, wherein said objects are formed in an aerodynamic shape.

26. (Currently Amended) Method according to claim [[19]] 1, wherein said objects are formed with one end having a rounded shape.

27. (Currently Amended) Method according to claim [[19]] 1, wherein said objects are formed with one end having a rounded shape and another end having outer surfaces which converge towards one another as said outer surfaces approach a tip end of said another end.

28. (Cancelled).